

REMARKS

The claims are unamended in this response to the final rejection.

In the Office Action mailed February 18, 2005, the Examiner rejected claims 5, 6, 13, 18, 19, 25, 39, 40, 59, 60, 62, 69, 72, 74 and 75 under 35 USC 102(b) as being anticipated by Hauffe. Applicant respectfully traverses this rejection.

Hauffe teaches a plastic meter box 11 and a corresponding plastic lid 31. The lid 31 has recesses, best shown in Fig. 2. Hauffe is preoccupied with providing a lid with a reader hatch 49 that can be opened to look inside the box without removing the whole lid 31. The lid 31 is locked in place by latch 41. Hauffe teaches that the lid is injection molded. Hauffe refers to two patents, 3,268,636 and 3,436,446, both of which teach injecting a foamable plastic into a mold by a piston.

Applicant is puzzled why the claims would be finally rejected by such art. Hauffe itself has no teaching of how strong the lid is. Hauffe teaches the same or similar type of lid as McKinnon, U.S Patent No. 4,163,503, discussed in the specification (page 1) of the subject application and also discussed by the inventor in his declaration of February 12, 2004. As the inventor, Robert McKinnon, Jr. states in his declaration of February 12, 2004, these type of lids have a load strength of about 1,200 pounds, well below the strength of 8000 pounds provided by all of the claims (9000 pounds in claim 75). (See Declaration of Robert McKinnon, Jr., February 12, 2005, paragraph 7.) In addition, the claims provide that the lid is compression molded; Hauffe uses injection molding. As stated by Mr.

McKinnon in his Declaration, compression molding squeezes out bubbles and makes a stronger lid (paragraphs 8, 9).

Thus, Hauffe fails to teach or suggest several elements of all of the claims, namely a lid capable of withstanding a load of at least 8000 pounds and a compression molded lid.

Claims 5, 18, 59, 60 also provide that the length of the elongated edges of the recesses are longer than one-half a given dimension of the member. The recesses of Hauffe lack this dimensional requirement in that the recesses are not long or wide enough. In fact, it takes four recesses to extend in either dimension of the Hauffe lid, as shown in Fig. 2. Each Hauffe recess is less than one-fourth the length or width of the lid. The length of the recess edge is noted in the claimed invention because the recesses enhance the curing of the plastic in this solid, strong lid. (See Declaration of Robert McKinnon, Jr., February 12, 2005, paragraphs 9 and 10.)

In addition, claims 19, 25, 62 provide two recesses of different shapes and dimensions. One recess has long and short edges. The other recess has transverse edges that are longer than the short edges of the one recess (See for example, Fig. 2 of the subject application, showing one recess 23 and another recess 27, 29.) The recesses 27, 29 are useful for receiving meter-reading equipment. Hauffe does not teach this and instead shows recesses of equal size.

Furtherstill, claim 69 provides that the recesses have a depth and at least some of the recesses are spaced apart from each other a distance greater than the depth. For example, in Fig. 10, the triangular recesses have a depth

of H2, and are spaced apart from each other by a distance of W3. W3 is greater than H2. Applicant has enclosed a marked up copy of Hauffe, Figs. 1 and 2, showing the corresponding dimensions H2 and W3. As can be seen, W3, the spacing between the recesses, is smaller, not larger, than H2, the depth of the recesses. Thus, Hauffe shows the opposite of the claimed invention.

Furtherstill, in claim 74, the recess is for remote reading equipment. Hauffe does not teach this.

The Examiner rejected claims 1, 3, 4, 9, 12, 15-17, 37 and 58 under 35 USC 103(a) as being unpatentable over Hauffe in view of Goodwin. Applicant respectfully traverses this rejection.

Certain factual inquiries are required in an obviousness determination under 35 USC §103(a). These factual inquiries, discussed in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966) are summarized as follows:

1. determining the scope and content of the prior art;
2. determining the differences between the prior art and the claims that issue;
3. determining the level of ordinary skill in the art.

In order to make a *prima facie* showing of obviousness, the Examiner must show that there is some suggestion or motivation to combine or modify the references, that there is a reasonable expectation of success and that the references teach or suggest all of the claim limitations, MPEP 706.2(j).

Regarding the first *Graham* inquiry, the scope and content of the prior art, the Examiner has cited Hauffe and Goodwin. Hauffe has been discussed above. Goodwin shows recesses in a lid. It is difficult to determine if the area of the recesses is less than the remaining area of the surface 11a (See Fig. 2). Goodwin shows a hollow lid that is rotationally molded or blow molded. There is also Lang, newly cited by Applicant in the attached Information Disclosure Statement. Lang may show a lid where the area of the recesses is less than the area of the remaining surface. The Lang lid has a plastic outside 11, 12 and a cement 50 fill material on the inside.

Regarding the second *Graham* inquiry, determining the differences between the prior art and the claims that issue, the claimed invention as a whole must be considered. *Stratosflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983). In addition to providing a compression molded all-plastic lid capable of withstanding a load of at least 8000 pounds, these claims provide that the area of the lower surface is greater than the total area surrounded by outer edges of the recesses.

Regarding the third *Graham* inquiry, the level of ordinary skill in the art, no determination has been made. However, Applicant has provided evidence on the skill in the art. Mr. McKinnon, the inventor, has at least ordinary skill in the art by virtue of his experience in plastics manufacturing (see Declaration of Robert McKinnon, Jr., paragraphs 3-4).

The Examiner has not made a *prima facie* of obviousness with regard to claims 5, 18 and 19. The Examiner states that, "It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the lid of Hauffe et al. with smaller recesses such that the

area of the lower surface is greater than the total area surrounded by the outer edges of the recesses, as taught by Goodwin, in order to increase the strength of the lid." Yet, there is no suggestion to combine these references. The Hauffe type lid is solid while the Goodwin lid is hollow and of a different construction. Neither reference mentions anything about surface area of the ribs versus surface area of the recesses. Why would one with ordinary skill in the art, seeking to modify a solid injection molded lid, look to a hollow lid?

The mere fact that the prior art may be modified in a manner suggested by the Examiner does not make the modification obvious, unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 23 USPQ 2d 1780 (Fed. Cir. 1992).

Even supposing that one with ordinary skill in the art wanted to make the Hauffe lid stronger, and that he or she may well make the ribs thicker, there is nothing in the references to suggest that the ribs of a modified Hauffe lid should be so thick as to have a total surface area that is greater than the surface area of the recesses. At most, Goodwin teaches that its ribs correspond with recesses in order to stack lids.

The lid of Lang actually leads away from Applicant's invention. Lang shows a lid for a manhole, which lid is strong and heavy. In fact, one of Lang's goals is to make a lid so heavy that children have difficulty moving it. The lid has recesses for receiving the bottom ends 28 of the handles. The lid is also mostly cement, contained in a plastic jacket. Thus, Lang teaches one with ordinary skill in the art that to make a heavy and strong lid, use

either jacketed cement or cast iron. Plastic as a lid material is only suitable for the jacket.

Furthermore, there is no evidence of a reasonable expectation of success in modifying Hauffe as proposed by the Examiner. The combination of ribs from a hollow lid (Goodwin) with an injection molded lid (Hauffe) presents technical challenges not addressed by the Examiner.

Even assuming, arguendo, that a *prima facie* showing of obviousness has been shown, Applicant has successfully rebutted any such showing with evidence.

There is no suggestion to combine the references. The inventor, Mr. McKinnon, is familiar with lids of the same type as Hauffe (See Declaration of Robert McKinnon, Jr., paragraph 7) and also has reviewed patents similar to Goodwin, which patents teach hollow lids (See Declaration of Robert McKinnon, Jr., paragraphs 11-14). Mr. McKinnon, who has at least ordinary skill in the art would not look to hollow lids to design a utility box lid. Based on his experience in plastics manufacturing, he would not look to double wall lid patents to design a compression molded lid.

Furthermore, there is no reasonable expectation of success. As stated by Mr. McKinnon, he was familiar with injection molded, ribbed lids before he began working on the invention, and knew that they were limited in strength (See Declaration of Robert McKinnon, Jr., paragraph 7). That is why he ultimately used compression molding (See Declaration of Robert McKinnon, Jr., paragraphs 9-10).

Because the Examiner has not made a *prima facie* case of obviousness, or to the extent the Examiner has made a *prima facie* showing

of certain elements, that showing has been rebutted by factual evidence, claims 1, 3, 4, 9, 12, 15-17, 37 and 58 are not obvious over the references.

Furthermore, claim 3 is similar to claim 5, discussed above. Claims 15, 16 are similar to claim 19, discussed above.

Furtherstill, claim 17 provides that a recess in an upper surface is partially aligned with a recess in the lower surface (see for example, Fig. 10). While Goodwin shows aligned recesses, Goodwin is a hollow lid that derives strength from two walls contacting each other. One with ordinary skill in the art would not look to Goodwin for teachings on positioning recesses in a solid compression molded lid.

The Examiner rejected claim 2 under 35 USC 103(a) as being unpatentable over Hauffe in view of Goodwin and further in view of Bonnema. Applicant respectfully traverses this rejection.

Claim 2 is dependent upon claim 1, the allowability of which has been discussed above.

The Examiner rejected claim 7 under 35 USC 103(a) as being unpatentable over Hauffe in view of Bonnema. Applicant respectfully traverses this rejection.

Claim 7 is dependent upon claim 5, the allowability of which has been discussed above.

The Examiner rejected claims 20-24, 26-35, 42, 61, and 63-65 under 35 USC 103(a) as being unpatentable over Hauffe. Applicant respectfully traverses this rejection.

Claims 20, 22, 23, 26-35 and 63-65 provide that the recess is triangular in cross-section. This shape is useful in curing the plastic of the compression molded lid that can withstand a high weight. Also, as stated in Mr. McKinnon's Declaration of October 5, 2001, the slanted angular surfaces of the elongated recesses provide support for loads and make a very strong plastic lid. Hauffe does not teach or suggest such recesses. The Examiner's contention that the cross-section would give a more decorative appearance does not present a *prima facie* case of obviousness, as the reference does not teach or suggest the modification, nor is there any suggestion in Hauffe to make this modification. The recess is in the lower surface of the lid. When in use, the recess faces inside the utility box and is therefore invisible. Also, the use of angular recesses uses more plastic and adds to the expense of the lid.

Claims 21, 24, 30, 33, 34 are similar to claim 19, discussed above.

Claims 28, 29, 35 are similar to claim 5, discussed above.

Claim 42 provides that the plastic has a density of .938-.942. Hauffe has no teaching of what plastic density it uses. Hauffe distinctly teaches a preference for foamed plastic, which likely has a lower density. As stated in Mr. McKinnon's Declaration, compression molding squeezes bubbles from the plastic to increase the strength (paragraphs 8, 9 of Declaration of February 12, 2004).

Claim 61 provides that the recesses are closer to the outer edge of the lid than to each other. Hauffe has no teaching about this, other than what is shown in the drawings. The ribs are of equal width.

The Examiner rejected claim 44 under 35 USC 103(a) as being unpatentable over Hauffe. Applicant respectfully traverses this rejection. Claim 44 is similar to claim 42, discussed above.

The Examiner rejected claims 66-68, 70, 71, and 73 under 35 USC 103(a) as being unpatentable over Hauffe. Applicant respectfully traverses this rejection.

Claim 66 and its dependent claims provides that the recesses have a depth that is no greater than two-thirds of the thickness between the member upper and lower sides. Again, the recesses of Applicant's invention are for curing a solid plastic compression molded lid, while still maintaining high strength. The recesses of Hauffe have a depth of 5/6 the overall thickness (using Fig. 1). That is to say that the recesses of Hauffe are deeper than the claimed invention. Hauffe has no mention of plastic curing. The thin ribs of a Hauffe lid would not present a curing problem. The preferred use of foamed plastic by Hauffe further leads one away from a curing problem. The Examiner does not present a *prima facie* case of obviousness, as the reference does not teach or suggest the modification, nor is there any suggestion in Hauffe to make this modification. One with ordinary skill in the art would not look to Hauffe to obtain relatively shallow recesses.

Nor does Hauffe, with its use of foamed plastic in the preferred and illustrated embodiment, have the curing problem associated with compression molding thick plastic pieces of one and a half inches, as provided in claims 67, 70, 71 and 73. Because there is no suggestion to modify Hauffe, there is no *prima facie* case of obviousness.

Even assuming, arguendo, that a *prima facie* showing of obviousness has been shown, Mr. McKinnon's declaration rebuts any *prima facie* case of obviousness. In his attempts to produce a plastic lid that has the immense strength of cast iron, as one with ordinary skill in the art, Mr. McKinnon initially tried a solid lid with no recesses. When he encountering the curing problem, he tried recesses and realized that instead of weakening the lid, the recesses made it stronger by allowing the plastic to cure. Mr. McKinnon went beyond routine experimentation in attempting to develop a thick compression molded lid that would not warp and that would properly cure. Thus, there was no reasonable expectation of success in modifying Hauffe as proposed by the Examiner.

Because the Examiner has not made a *prima facie* case of obviousness, or to the extent the Examiner has made a *prima facie* showing of certain elements, that showing has been rebutted by factual evidence, the claims are not obvious over the references.

In view of the foregoing, it is submitted that all the claims in the application are allowable and such allowance is respectfully requested.

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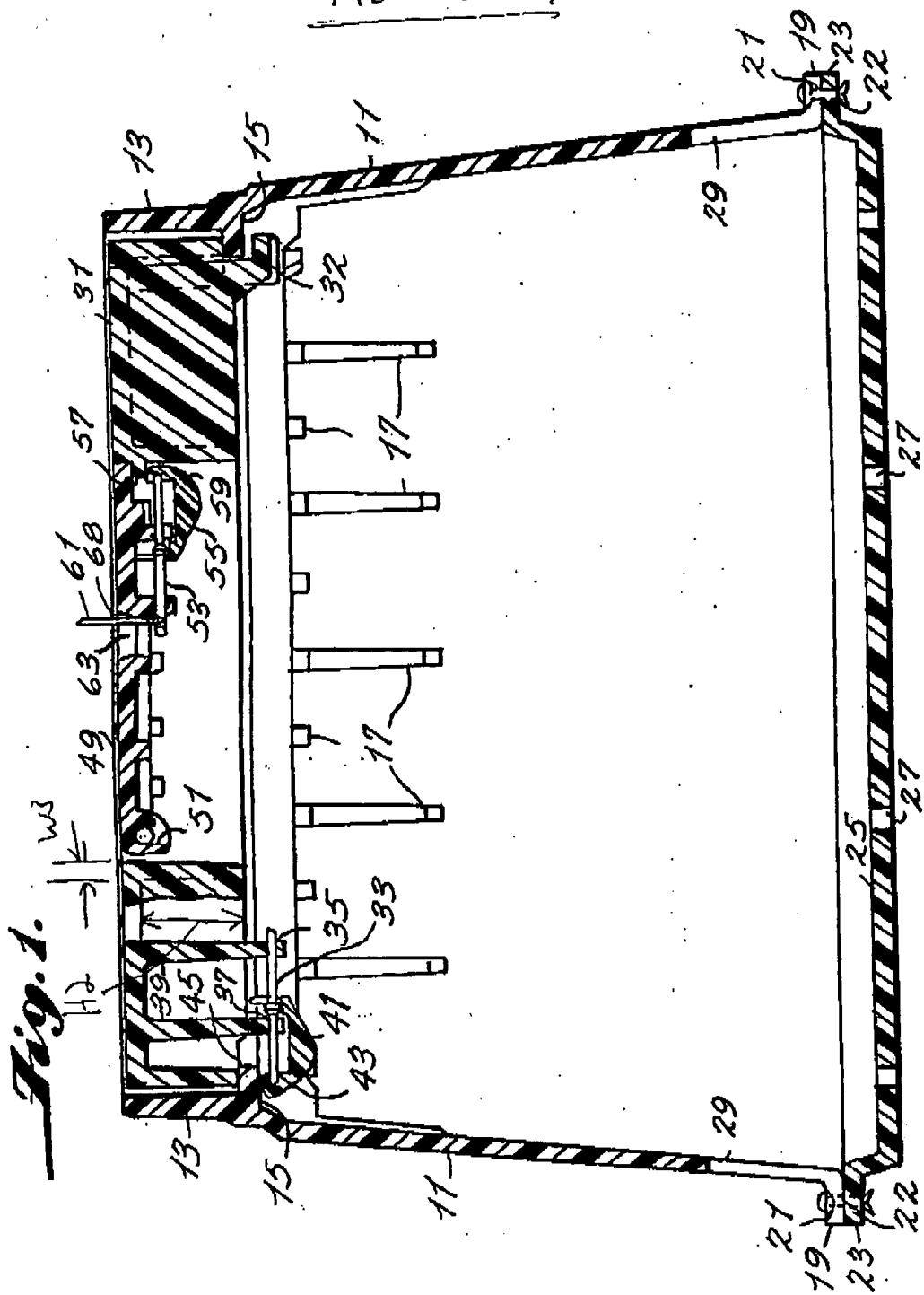
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U.S. Patent Nov. 25, 1975 Sheet 1 of 3 3,921,449

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